

CLAIMS

I CLAIM:

1. An unbonded capping system for compression testing of concrete
2 cylinders, comprising:
first and second retaining cups comprising metal blocks each having opposite
4 parallel planar surfaces, a first of the planar surfaces being engagable by a test apparatus, in use,
and a second of the planar surfaces having a cylindrical cavity of a first select diameter for
6 receiving one end of the concrete cylinder; and
first and second cylindrical compression pads each to be received in one of the
8 retaining cup cavities to abut an end of the concrete cylinder, in use, and being of a second select
diameter smaller than the first select diameter of the cavity to define a circumferential space
10 therebetween, and comprising means for gripping the cavity to prevent the compression pads
from falling out of the cavities.
2. The unbonded capping system of claim 1 wherein the first and second
2 retaining cups are of high alloy steel construction.

3. The unbonded capping system of claim 1 wherein the first and second
2 retaining cups are cylindrically shaped and the parallel planar surfaces define end walls.

4. The unbonded capping system of claim 1 wherein the first and second
2 compression pads comprise one piece neoprene pads.

5. The unbonded capping system of claim 1 wherein the first and second
2 compression pads each comprises a cylindrical sidewall of the second select diameter and the
gripping means comprises a plurality of circumferentially spaced nubs extending radially
4 outwardly from the sidewall.

6. The unbonded capping system of claim 5 wherein the first select diameter
2 is about 1/16 of an inch larger than the second select diameter.

7. The unbonded capping system of claim 6 wherein the nubs have a height
2 of about 1/16 of an inch.

8. The unbonded capping system of claim 6 wherein the nubs have a height
2 in a range of about 0.05 to 0.065 inches.

9. For use with an unbonded capping system for compression testing of
2 concrete cylinders, including first and second retaining cups comprising metal blocks each
having opposite parallel planar surfaces, a first of the planar surfaces being engagable by a test
4 apparatus, in use, and a second of the planar surfaces having a cylindrical cavity of a first select
diameter for receiving one end of the concrete cylinder, first and second compression pads each
6 comprising:

a cylindrical block of elastomeric material having a cylindrical sidewall, to be
8 received in one of the retaining cup cavities to abut an end of the concrete cylinder, in use, the
sidewall being of a second select diameter smaller than the first select diameter of the cavity to
10 define a circumferential space therebetween, and comprising means for gripping the retaining
cup to prevent the compression pad from falling out of the cavity.

10. The compression pads of claim 9 wherein the first and second
2 compression pads comprise one piece neoprene pads.

11. The compression pads of claim 9 wherein the gripping means comprises a
2 plurality of circumferentially spaced nubs extending radially outwardly from the sidewall.

12. The compression pads of claim 11 wherein the first select diameter is
2 about 1/16 of an inch larger than the second select diameter.

13. The compression pads of claim 12 wherein the nubs have a height of
2 about 1/16 of an inch.

14. The compression pads of claim 12 wherein the nubs have a height in a
2 range of about 0.05 to 0.065 inches.

15. In an unbonded capping system for compression testing of concrete
2 cylinders, comprising retaining cups comprising metal blocks having a cylindrical cavity of a
first select diameter for receiving one end of the concrete cylinder, and cylindrical compression
4 pads each to be received in one of the retaining cup cavities to abut an end of the concrete
cylinder, in use, and being of a second select diameter smaller than the first select diameter of the
6 cavity to define a circumferential space therebetween, the improvement comprising:
means operatively associated with the compression pads for gripping the
8 retaining cup cavity to prevent the compression pads from falling out of the cavities.

16. The improvement of claim 15 wherein the first and second compression
2 pads comprise one piece neoprene pads.

17. The improvement of claim 15 wherein the first and second compression
2 pads each comprises a cylindrical sidewall of the second select diameter and the gripping means
comprises a plurality of circumferentially spaced nubs extending radially outwardly from the
4 sidewall.

18. The improvement of claim 17 wherein the first select diameter is about
2 1/16 of an inch larger than the second select diameter.

19. The improvement of claim 18 wherein the nubs have a height of about
2 1/16 of an inch.
20. The improvement of claim 18 wherein the nubs have a height in a range of
2 about 0.05 to 0.065 inches.